

Abstract of the Disclosure

A distributed gateway includes distributed gateway routing elements co-located with SS7 network elements. Each distributed gateway routing element performs an SS7 routing function, such as an MTP level 3 routing function. The distributed gateway routing elements communicate with each other over a virtual bus that guarantees quality of service for SS7 message packets. Accordingly, the distributed gateway routing elements set quality of service parameters in the SS7 message packets that are forwarded over the virtual bus.